Claims:

1. An optically addressable pixel, comprising:

a emission sensor;

a filter disposed to filter emissions directed toward said emission sensor;

a emission device responsive to said emission sensor;

a frame configured to hold said emission sensor, said emission device and said filter, and to pass electric current to said emission device when an outer surface of said frame is brought into contact with a powered conductor.

2. The pixel according to claim 1, wherein said filter emission sensor receives emissions on one side of the pixel and said emission device produces a display on the one side.

3. The pixel according to claim 2, wherein said emission sensor is held adjacent to said emission device by said frame on the one side.

4. The pixel according to claim 1, said filter receives emissions on one side of said pixel and said emission device produces a display on an opposite side of said pixel.

5. The pixel according to claim 1, comprising a plurality of respective emission sensors, filters and emission devices held in said frame.

6. The pixel according to claim 5, wherein said each of said plurality of filters comprises a polarization filter, and each of said plurality of respective emission sensors is responsive to a different band of polarization phases.

7. The pixel according to claim 6, further comprising a printed circuit board held in said frame, said printed circuit board electrically connecting said plurality of emission devices and said plurality of respective emission sensors.

8. The pixel according to claim 1, wherein said filter comprises a polarization filter, the pixel further comprising:

a rotatable cap connected to said frame, said polarization filter being held by said cap); and

a plurality of respective emission sensors and emission devices held in said frame;

wherein a rotational position of said cap determines which one or more of said plurality of respective emission sensors may receive emissions of a proper band to activate emission devices of a respective single color.

9. The pixel according to claim 8, further comprising blacked out portions on said polarization filter to align with all emissions sensors corresponding to all but one or more of said plurality of emission sensors based upon the rotational position of said cap.

10. The pixel according to claim 8, wherein said plurality of respective emission sensors are polarization sensitive, with at least one emission sensor in said plurality of emission sensors corresponding to each of a plurality of colors of emission devices in said plurality of emission devices, and wherein emission sensors corresponding to different colors are responsive to different polarization bands, and wherein the rotational position of said cap determines which of said colors are active.

11. A receptacle array, comprising

a pixel of claim 1, inserted into a receptacle array, the receptacle array including a plurality of receptacles shaped to accommodate pixels, each of said receptacles making electrical contact with the frame of an inserted pixel

12. The receptacle array of claim 11, wherein said frame and said receptacles are hexagon shaped.

13. The receptacle array of claim 11, wherein said plurality of receptacles are shaped to configure said receptacle array in a honeycomb shape.

14. The receptacle array of claim 11, wherein said receptacles are formed from rows of conductors, with insulation disposed between alternating ones of the conductors.

15. An optically addressed display device, comprising

a receptacle array of claim 11, wherein said pixel is one of many pixels in said receptacle array, and each said pixel includes at least three LEDs of different colors as emission devices, and said pixels are part of an optically addressed display device including:

an emission source and optics defining multiple color channels with emissions of multiple polarization states;

said filter comprising filtering to make commonly colored LEDs responsive to different emissions than other sets of commonly colored LEDs; and

a data encoder that applies data, on a pixel-by-pixel and channel-by-channel basis to said emissions by permitting emissions to reach a pixel indicated to be on by the data.

16. The display device of claim 15, wherein said LEDs are powered through an electrical contact between said receptacles and respective frames of said pixels.

17. The display device of claim 16, wherein said filter comprises a set of color filters to make commonly colored LEDs responsive to different emissions than other sets of commonly colored LEDs.

18. The display device of claim 15, said receptacles are formed from rows of conductors, with insulation disposed between alternating ones of the conductors.

19. A pixel for an optically addressed display, comprising:

a frame shaped to fit into a corresponding receptacle;

emission devices of plural colors held within the frame to make electrical contact with a power circuit when the frame is inserted into a corresponding receptacle; and

for each of the plural colors, an emission sensor that responds to emissions by activating an emission device or emission devices of one or more of the plural colors

20. The pixel of claim 19, further comprising, for each emission sensor corresponding to one or more of the plural colors, a filter that passes a band of emissions different from that of emission sensors corresponding to others of the plural colors.

21. The pixel of claim 20, wherein each of said filters comprises a polarization filter, each being physically identical but rotationally positioned to be pass a band of polarized emissions different from that of filters corresponding to others of the plural colors.

22. The pixel of claim 19, wherein said emission devices comprise LEDs positioned to produce a display on one side of the frame and said filters and emission sensors are positioned to receive emissions from an opposite side of the frame.

23. The pixel of claim 19, wherein said emission devices comprise LEDs positioned to produce a display on one side of the frame and said filters and emission sensors are positioned to receive emissions from said one side of the frame.

24. The pixel of claim 19, comprising one emission device of each of the plural colors.

25. The pixel of claim 19, comprising a plurality of emission devices of each of the plural colors.

26. The pixel of claim 19, wherein said emission devices make electrical contact through pins that extend from the frame.

27. The pixel of claim 19, wherein said emission devices make electrical contact through their respective frames.

28. A method of producing display from a pixel in an optically addressed pixel array, the method comprising the steps of:

selectively positioning an optically addressed pixel capable of displaying multiple colors to receive a specific phase of a polarized emission and accordingly display only one of the multiple colors;

inserting said pixel into a receptacle array in the position determined in said step of selectively positioning; and

supplying power to said pixel.

29. The method of claim 28, wherein the step of supplying power supplies power through the receptacle array.

30. The method of claim 28, carried out to replace a pixel in the optically addressed pixel array.

31. A pixel for an optically addressed display, comprising:

means for producing displays of a plurality of colors;

sensor means for each of the plurality of colors to activate said means for producing in response to received emissions; and

means for making each of said sensor means responsive to emissions of a different polarization band.

32. An optically addressable pixel, comprising:

a emission sensor;

a emission device responsive to said emission sensor;

a frame configured to hold said emission sensor and said emission device, and to pass electric current to said emission device when an outer surface of said frame is brought into contact with a powered conductor.

33. The pixel according to claim 32, further comprising a printed circuit board held in said frame, said printed circuit board electrically connecting said emission device and said emission sensor.

34. The pixel according to claim 32, wherein said emission device is of an arbitrary color of a color scheme and serves to replace a pixel of said arbitrary color or another color of said color scheme.

35. A receptacle array, comprising:

a pixel of claim 32, inserted into a receptacle array, the receptacle array including a plurality of receptacles shaped to accommodate pixels, each of said receptacles making electrical contact with the frame of an inserted pixel

36. The receptacle array of claim 35, wherein said frame and said receptacles are hexagon shaped.

37. The receptacle array of claim 35, wherein said plurality of receptacles are shaped to configure said receptacle array in a honeycomb shape.

38. The receptacle array of claim 35, wherein said receptacles are formed from rows of conductors, with insulation disposed between alternating ones of the conductors.

39. The receptacle array of claim 38, further comprising at least one capacitive element inserted into at least one of said plurality of receptacles.

40. A receptacle array, comprising:

rows of conductors shaped to define pixel receptacles between the conductors;

insulation between the rows of the conductors to isolate; wherein the rows of the conductors and insulation are arranged to provide power and ground through alternating ones of said rows of conductors.

41. The receptacle array of claim 40, wherein said rows of conductors are shaped into a honeycomb shape that defines hexagonal pixel receptacles.

42. The receptacle array of claim 40, wherein said insulation comprises insulating adhesive that joins said rows of conductors.